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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,665	08/15/2001	Sudhindra Pundaleeka Herle	SAMS01-00152	3249

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12/12/2006

Docket Clerk  
P.O. Drawer 800889  
Dallas, TX 75380

EXAMINER
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FERRIS, DERRICK W

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/930,665

Applicant(s)

HERLE ET AL.

Examiner

Derrick W. Ferris

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3-8 and 10-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-8, and 10-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. This Office action is in response to applicant's paper filed 10/24/2006. **Claims 1, 3-8, and 10-20** as amended are currently pending. The current Office action is made non-final since new art is applied to at least previously allowed claims 15-20.
2. Examiner **withdraw** the obviousness rejection to *Takagi '733* in view of *Takagi '148*. In particular, the rejection is withdrawn based on the claims as necessitated by amendment.
3. Examiner **withdraws** the obviousness rejection to *Mulligan et al.* ("*Mulligan*") in view of *Lettieri et al.* ("*Lettieri*"). In particular, the rejection is withdrawn based on the claims as necessitated by amendment.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 3-8, and 10-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6, 564,267 B1 to *Lindsay et al.* ("*Lindsay*") in view of "Adaptive Frame Length Control for Improving Wireless Link Throughput, Range, and Energy Efficiency" to *Lettieri et al.* ("*Lettieri*").

As to **claim 1**, *Lindsay* discloses a network adaptor capable of maximizing the segment size for a connection between a TCP/IP host 24 and a remote endpoint 40, see e.g., figure 5. For the rejection, a network adaptor 42 is construed as a "packet relay"

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which relays connections to/from a packet network connecting TCP/IP host 24 and to/from a “second network” connecting a remote endpoint 40. As such, the relay has a connection to the packet network via the PCI bus, see e.g., figure 1 labeled as prior art. In particular, note the intermediate nodes such as bridge 58 (emphasis added). In particular, the network adaptor could be an embedded network appliance, see e.g., column 3, lines 45-60 and the network adaptor further receives e.g., a TCP packet from the host thus teaching a first network since the packet is *relayed* to the second network. A packet relay controller is taught e.g., as the MAC controller 70 shown in figure 7. As such, shown in figure 5 the packet network as an MTU size of 8760. The “second network” has an MTU size of 1460 which is negotiated by the network adaptor 42. Thus the first maximum transmission unit size is larger than the second transmission unit size. The re-formatted data is shown e.g., in figure 6. In addition, note that the relay device operates bi-directionally, see e.g., column 4, lines 35-44.

*Lindsay* is silent or deficient to the further limitation that the “second connection” is a wireless link. In particular, *Lindsay* teaches that the external network 38 can be any type of connection, see e.g., column 4, lines 55-65.

*Lettieri* teaches the further recited limitation above at e.g., figure 6. In particular, *Lettieri* teaches that it is well known in the art that a network adaptor can be a wireless NIC.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Lindsay* by clarifying that it is well known in the art to communicate over a wireless link.

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As such, the examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to communicate with a remote host that is on a wireless network. In particular, *Lettieri* cures the above-cited deficiency by providing a motivation found at e.g., page 564.

As to **claims 3-4**, the MTU size is optimal and suitable since the network adaptor helped select the MTU size.

As to **claim 5**, see e.g., column 4, lines 35-43 with respect to forming bigger blocks.

As to **claim 6**, see e.g., figure 6 with respect to fragmenting packets.

As to **claim 7**, TCP/IP is supported, see e.g., column 3, lines 52-60.

As to **claim 8**, see similar rejection to claim 1.

As to **claim 10**, see similar rejection to claim 3.

As to **claim 11**, see similar rejection to claim 4.

As to **claim 12**, see similar rejection to claim 5.

As to **claim 13**, see similar rejection to claim 6.

As to **claim 14**, see similar rejection to claim 7.

As to **claim 15**, see similar rejection to claim 1. As noted previously, once the connection is established the communication is bi-directional, see e.g., column 4, lines 35-44.

As to **claim 16**, see similar rejection to claim 1.

As to **claim 17**, see similar rejection to claim 3.

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As to **claim 18**, see similar rejection to claim 4.

As to **claim 19**, see similar rejection to claim 5.

As to **claim 20**, once the connection is established the communication is bi-directional, see e.g., column 4, lines 35-44.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571)272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
DWF

Derrick W. Ferris  
Examiner  
Art Unit 2616

  
12/7/06  
DERRICK W. FERRIS  
PRIMARY PATENT EXAMINER